

**REMARKS**

Claims 10, 11 and 18 currently appear in this application. The Office Action of December 28, 2006, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

**Telephone Interview**

Applicant's attorney wishes to thank Examiner Angebranndt for the courtesies extended during the telephone conference of November 10, 2007. During that interview, Examiner Angebranndt suggested that the 102(b) rejection based upon JP 60-08392 could be overcome by including in claim 10 the limitation that the track pitch is below 0.74 micron.

**Art Rejections**

Claims 10-12 and 18 are rejected under 35 U.S.C. 102(b) as being fully anticipate by JP-60-083892.

This rejection is respectfully traversed. As Examiner helpfully suggested during the November 10 telephone interview, claim 10 has been amended to recite that the track

pitch is below 0.74 micron. It is believed that this obviates the rejection.

Claims 10-12 and 18 are rejected under 35 U.S.C. 102(b) as being fully anticipated by JP 60-232995.

This rejection is respectfully traversed. Claim 10 has been amended to define "X<sup>-</sup>" in Formula 1 as "a counter ion, an azo organic metal complex ion." Support for this amendment can be found in the specification as filed at Chemical Formula 25 at page 16, Chemical Formula 43 at page 18 and Chemical Formula 43 at page 20. The paragraph bridging pages 9 and 10 provides support for an azo organic metal complex. While JP 60-232995 discloses a quencher which corresponds to X<sup>-</sup>, JP 60-232995 neither discloses nor suggest that the quencher is an azo organic metal complex ion. Thus, the styryl dye represented by Formula 1 of claim 10 is distinct from the dye disclosed in JP 60-232995, it is believed that this patent does not anticipate claims 100-12 and 18.

Claims 10-12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-232995.

This rejection is respectfully traversed. As mentioned above, JP 60-232995 neither discloses nor suggests

an azo organic metal complex ions. Furthermore, JP 60-232995 teaches nothing about an optical recording medium comprising a styryl dye represented by Formula 1 that could have such a high recording capacity of exceeding 4.7 GB per side by forming pits with a pit width of less than 0.4 microns/pit and a track pitch of below 0.74 microns when formed into a disk 12 cm. in diameter. Therefore, it is respectfully submitted that claims 1, 11 and 18 would not have been obvious over JP 60-232995 at the time the present application was filed.

Submitted herewith is a copy of *Magneto-Optical Recording Materials* Edited by Richard J. Gambino, Takao Suzuki, published by IEEE Press Marketing, page 3, 2000. As shown in Figure 12 of this article, an optical recording medium having a recording capacity of more than 4.7 GB had not been known at the time JP 60-232995 was published, i.e., in 1983.

Claims 10-12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-232995 in view of Okusa et al., '046.

This rejection is respectfully traversed. Okusa et al. '046 neither discloses nor suggests an azo organic metal complex ion in the styryl compound. Moreover, Okusa teaches nothing about an optical recording medium comprising a styryl

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dye represented by formula 1 that has a recording capacity exceeding 4.7 GB per side by forming pits with a pit width of less than 0.4 micron/pit and a track pitch of below 0.74 micron when formed into a disk 12 cm in diameter.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action and withdrawal of all rejection is earnestly solicited.

Respectfully submitted,

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# MAGNETO-OPTICAL RECORDING MATERIALS

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Optical storage evolution

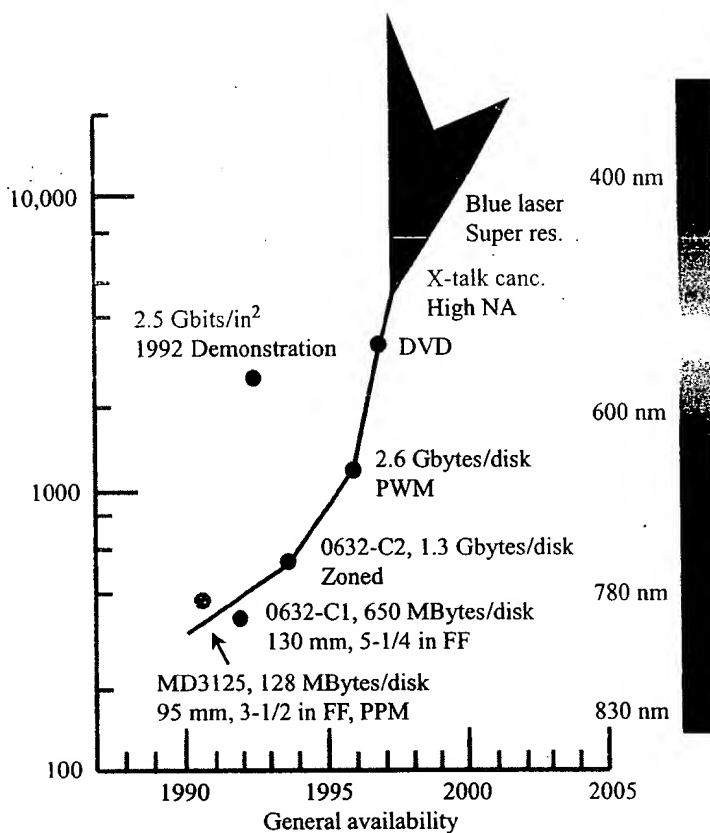


Figure 1.2 Evolution of optical storage technology. The acronyms are explained in the text.

patible with their previous investments in data stored on older generation media. Another key factor is cost. The sale price (\$/MB) must be significantly lower compared to other prior generations of optical storage products and alternative storage systems (e.g., removable hard disk drives).

To increase the capacity in optical storage media, many solutions are possible:

Shorter wavelengths [1],

$$1.5(670 \text{ nm}) \sim 3.8X(428 \text{ nm})$$

Magnetically induced super resolution (MSR) [2, 3]  
(see Chapter 9)

$$\geq 2X$$

Pulse width modulation (PWM)

$$1.5 \sim 2X$$